

RADIATION SURVEY WORKSHEET

eXaminer Radiation Survey Information

Airport:	<i>T.F Green Airport</i>	Scanner Location:	<i>Baggage Handling Room</i>	Case#:	<i>PVD-C304600</i>
Personnel Performing Radiation Survey:			<i>[Redacted]</i>		
Scanner Serial Number:	<i>6758</i>	Entrance Tunnel Serial Number:	<i>1105</i>	Date Survey Performed:	<i>6/3/2010</i>
High Reading:	<i>56</i>	Average Reading:	<i>20.85</i>	Min. Reading:	<i>7</i>
		High Reading:	<i>116</i>	Average Reading:	<i>28.86</i>
		Min. Reading:	<i>5</i>	High Reading:	<i>48</i>
		Average Reading:	<i>21.52</i>	Min. Reading:	<i>10</i>
Good		Good		Good	
Radiation Meter:	Type Meter:	<i>451P</i>	Meter Serial Number:	<i>6230</i>	Calibration Due Date:
					<i>December 22, 2010</i>

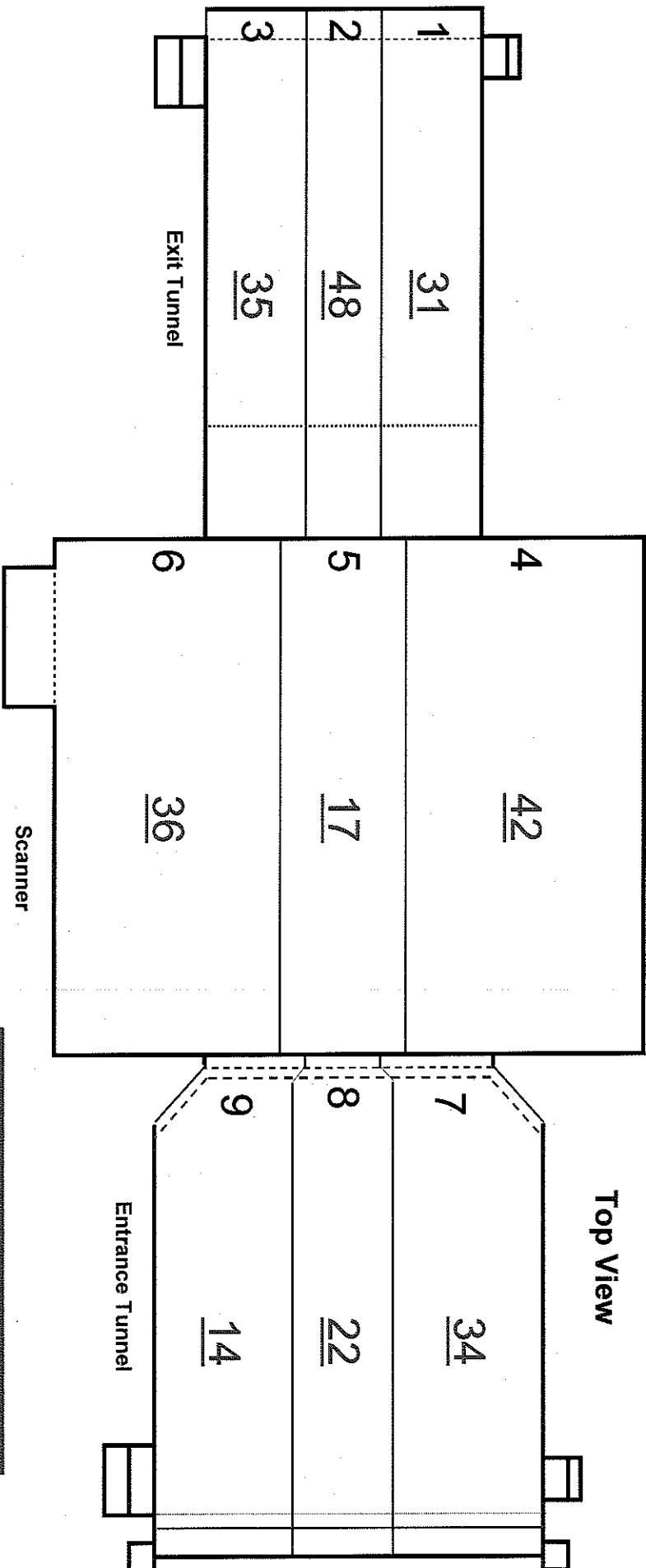
Complete Radiation Survey (CRS)

Record Voltage and Bean Current here:

Rename this Document before starting the Survey to:	Voltage: <u>165</u> KV Beam Current: <u>10.0</u> mA
PVD-CRS-3JUN2010-6758	Maximum Safe Readings Scanner 350 Tunnels 350 Curtains 350

Step	Procedure	Expected results
1.	Set Up: Obtain Invision Ion Chamber Survey Meter and in an area away from the scanners, turn on the meter by pressing the On-Off key. Wait approx. 4 minutes for the meter to run through the initialization procedure.	The GUI will be visible and will indicate Standby. After the radiation meter initialization procedure is complete the meter will be reading less than 20 uR/hr and the meter will be ready for use.
2.	The scanner will be in Standby. Change the conveyor switch on the scanner to Stop. Change the exit tunnel conveyor switch to Off to stop the conveyor.	Both conveyors should be stopped.
3.	On the GUI dropdown screen, select diagnostic, followed by Radiation Survey. A radiation survey window will appear. Click "Turn On" button to turn x-rays on. Turn on x-rays prompt will say "Place survey bag on belt". Place IQTK bag on Entry Conveyor Belt.	A window indicating "Radiation Survey" will appear.
4.	When "Bag in survey position" appears, go to the FCC monitor and select "2" then <Enter>, verify and record the voltage and current in the displayed on the FCC screen in the planks provided above.	The high voltage is between 144KV and 176KV. The current is between 8.8mA and 10.6mA and the scanner X-ray indicator lights are on.
5.	Survey one of the areas indicated by the boxes in Appendix A2. Record the highest reading within the area. Repeat the process until all areas are surveyed and readings are recorded.	As the survey is conducted, the radiation meter indicates the degree of radiation emission.
6.	Review all radiation data sheets for high readings.	Readings shall not exceed 350 uR/hr in any box.
7.	After radiation survey is complete, click on "Start Conveyor" button on the GUI. Click the "Turn Off" button to turn off x-rays. Next click "Done". The IQTK bag will eject from exit tunnel. EDAC will reboot.	IQTK bag is ejected and scanner reboots.
7.	Visually inspect the entrance and exit of the system for X-ray caution hazard signs.	X-ray hazard signs reading "Do not insert any part of the body when system is energized" are posted at entrance and exit of system.
9.	Fill out the eXaminer radiation stickers and place on the eXaminer in accordance with Examiner Technical Bulletin ex253.	Readings shall not exceed 350 uR/hr in any box.

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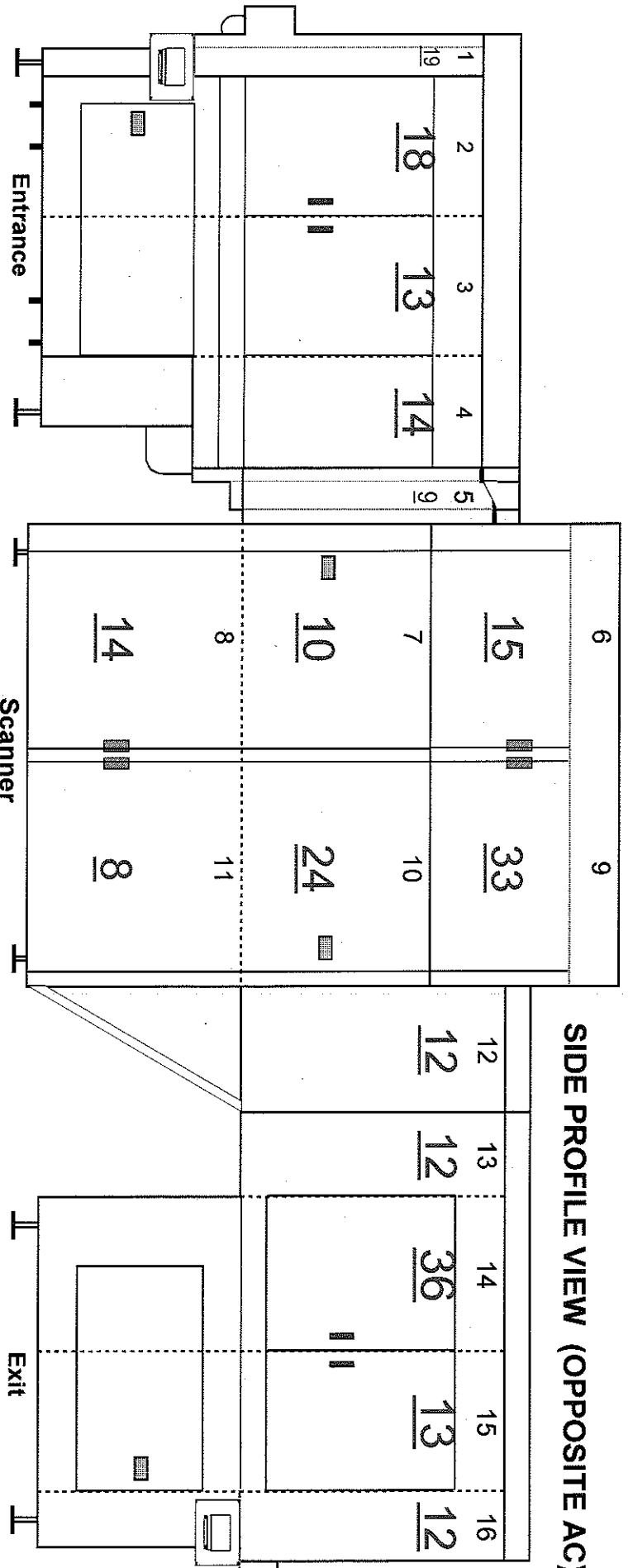


Top View		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel	µR/Hr	No PROBLEM
1 Exit Conveyor Top Panel	31	
2 Exit Conveyor Top Panel	48	
3 Exit Conveyor Top Panel	35	
4 Scanner Conveyor Top Panel	42	
5 Scanner Conveyor Top Panel	17	
6 Scanner Conveyor Top Panel	36	
7 Entrance Conveyor Top Panel	34	
8 Entrance Conveyor Top Panel	22	
9 Entrance Conveyor Top Panel	14	

GOOD

Highest Reading	48
Average Reading	31
Lowest Reading	14

RADIATION SURVEY WORKSHEET

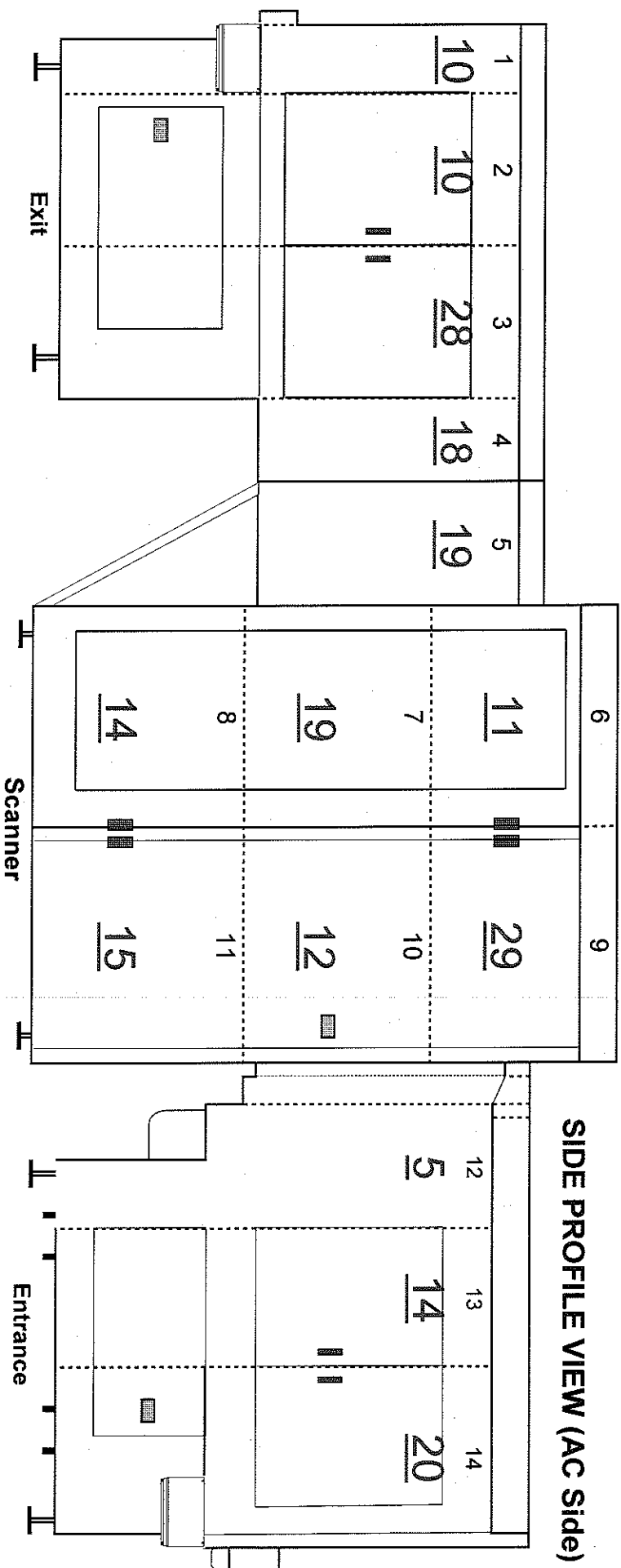


SIDE PROFILE VIEW (OPPOSITE AC)

SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel	µR/Hr	No PROBLEM
1 Entrance Conveyor Panel	19	
2 Entrance Conveyor Panel	18	
3 Entrance Conveyor Panel	13	
4 Entrance Conveyor Panel	14	
5 Entrance Conveyor / Scanner Panel	9	
6 Upper Scanner Panel	15	
7 Middle Scanner Panel	10	
8 Lower Scanner Panel	14	
9 Upper Scanner Panel	33	
10 Middle Scanner Panel	24	
11 Lower Scanner Panel	8	
12 Exit Conveyor / Scanner Panel	12	
13 Exit Conveyor Panel	12	
14 Exit Conveyor Panel	36	
15 Exit Conveyor Panel	13	
16 Exit Conveyor Panel	12	

Highest Reading	36
Average Reading	16
Low Reading	8

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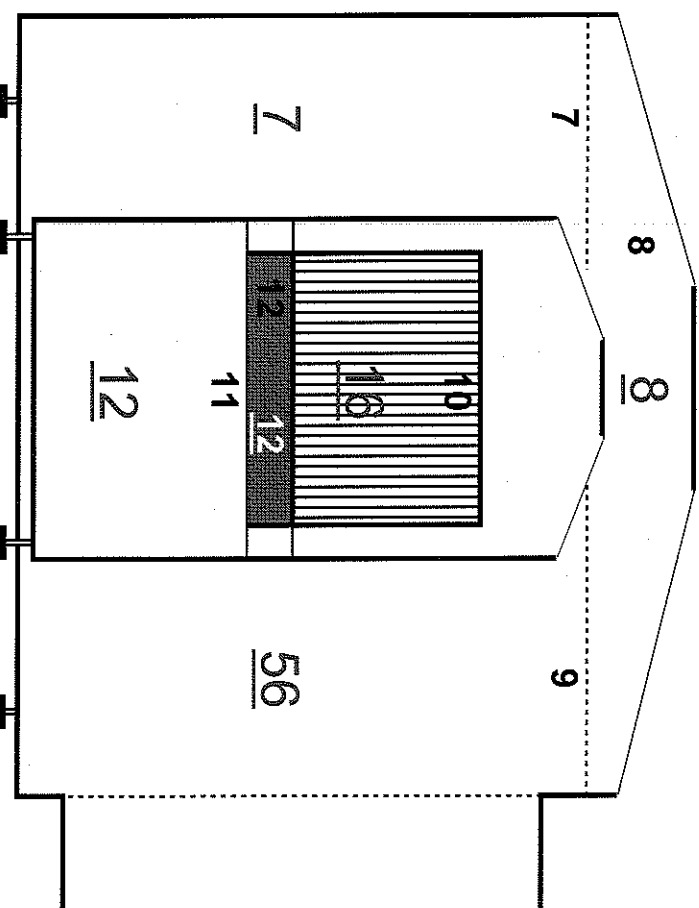
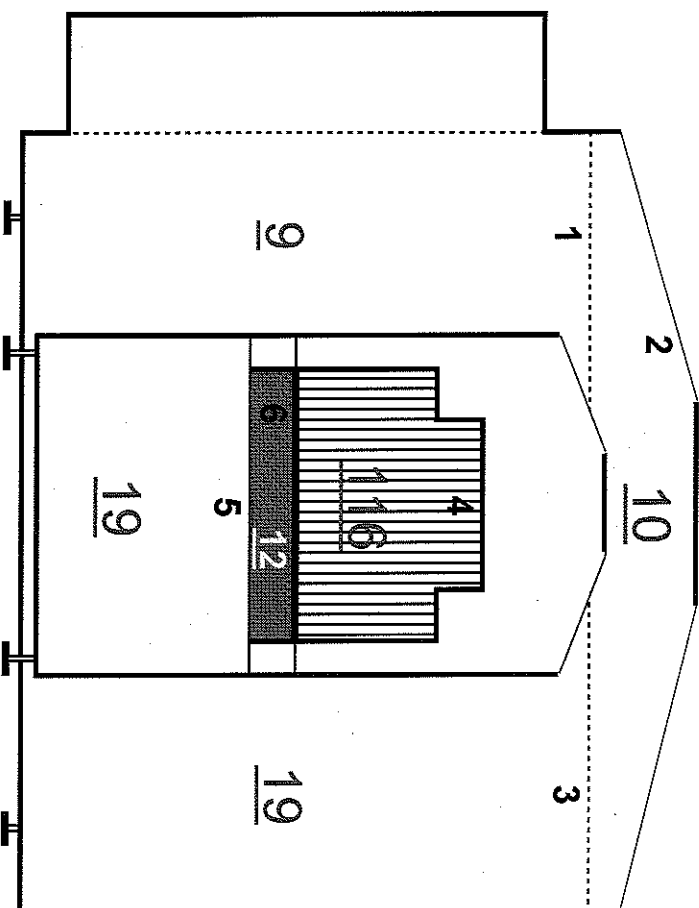
SYSTEM - SIDE PROFILE VIEW (AC Side)		
Scattered Radiation Measurement Points Worksheet		No PROBLEM
Record highest reading per panel		µR/Hr
1	Exit Conveyor Panel	10
2	Exit Conveyor Panel	10
3	Exit Conveyor Panel	28
4	Exit Conveyor Panel	18
5	Exit Conveyor / Scanner Panel	19
6	Upper Scanner Pane	11
7	Middle Scanner Panel	19
8	Lower Scanner Panel	14
9	Upper Scanner Panel	29
10	Middle Scanner Panel	12
11	Lower Scanner Panel	15
12	Entrance Conveyor / Scanner Panel	5
13	Entrance Conveyor Panel	14
14	Entrance Conveyor Panel	20

GOOD

Highest Reading	29
Average Reading	16
Low Reading	5

RADIATION SURVEY WORKSHEET

SYSTEM - FACES (End Views)



GOOD

SYSTEM - FACES (End Views)		
Scattered Radiation Measurement Points Worksheet		No PROBLEM
Record highest reading per panel		µR/Hr
1	Scanner Panel	9
2	Scanner Top Panel	10
3	Scanner Panel	19
4	Belt Entrance	116
5	Entrance Lower Panel	19
6	Belt Lower Facia Cover Entrance	12
7	Scanner Panel	7
8	Scanner Top Panel	8
9	Scanner Panel	56
10	Belt Exit	16
11	Exit Lower Panel	12
12	Belt Lower Facia Cover Exit	12

Highest Reading	116
Average Reading	25
Low Reading	7